

Version with markings to show changes made.

31. (Twice Amended) A method of DNA or RNA purification comprising:
placing a DNA or RNA containing sample [and a sample denaturing solution] in a first reservoir tube with a solution to effect release of DNA or RNA from cells in said sample,

inserting a wand into said first reservoir tube, wherein said wand comprises a cap, a sample collection assembly and an elongated shaft connecting said cap to said sample collection assembly, said sample collection assembly having microstructures for increasing the surface area of the sample collection assembly;

securely and sealingly closing said first reservoir tube with said cap of said wand with said shaft and said sample collection assembly inside said first reservoir tube;

agitating said first reservoir tube to mix said sample with said [sample denaturing] solution under conditions for [denaturing] releasing said DNA or RNA from cells in said sample and binding said DNA or RNA to said sample collection assembly, thereby binding said DNA or said RNA to said sample collection assembly;

removing said wand from said first reservoir tube and inserting said wand into a second reservoir tube, said second reservoir tube containing a wash buffer;

securely and sealingly closing said second reservoir tube with said cap of said wand with said shaft and said sample collection assembly inside said second reservoir tube;

agitating said second reservoir tube to mix said sample with said wash buffer;

removing said wand from said second reservoir tube and inserting said wand into a third reservoir tube, said third reservoir tube containing an elution buffer;

incubating said third reservoir tube; and

recovering purified DNA or RNA from said third reservoir tube.

65. (Amended) The method of claim 63, wherein said conditions for denaturing DNA or rendering RNA suitable for binding comprise: heating said reservoir tube to

95°C for a sufficient time to denature said double stranded DNA or render said RNA suitable for binding [several minutes].

66. (Amended) The method of claim 63, wherein said microstructures comprise deep reactive ion etchings or toolings that provide [a vast] an increased surface area on said sample collection assembly.

67. (Amended) The method of claim 31, wherein said microstructures comprise deep reactive ion etchings or toolings that provide [a vast] an increased surface area on said sample collection assembly.